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CERTAIN PRINCIPLES OF BIOMORPHIC ROBOTS

ABSTRACT OF THE DISCLOSURE

Robots and other mobile apparatus, especially robotic bipeds, that exhibit agile capabilities can become easily destabilized by obstacles or particular surfaces. An algorithm for controlling the movement of a robot based on visual cues and learning processes will help to avoid destabilization and movement interruption by altering the gait measurement. As such, when the robot predicts that an obstacle is upcoming, it can make adjustments by either increasing or decreasing stride so that a smooth transition can be made in bypassing the obstacle.